1.4.2 2006 Buildings Energy End-Use Carbon Dioxide Emissions Splits, by Fuel Type (Million Metric Tons) (1)

	Natural	Petroleum								
	Gas	Distil.	Resid.	LPG	Oth(2)	Total	Coal	Electricity (3)	Total	Percent
Space Heating (4)	228.7	53.1	8.9	14.4	6.6	83.0	8.9	99.6	420.2	18.8%
Lighting								405.6	405.6	18.1%
Space Cooling	1.1							288.9	290.0	13.0%
Water Heating	86.4	11.1		3.5		14.6		109.0	210.0	9.4%
Refrigeration (5)								132.0	132.0	5.9%
Electronics (6)								179.3	179.3	8.0%
Cooking	23.8			2.0		2.0		50.2	76.0	3.4%
Ventilation (7)								64.9	64.9	2.9%
Wet Clean (8)	3.9							72.2	76.1	3.4%
Computers								52.8	52.8	2.4%
Other (9)	14.5	1.4		14.7	3.5	19.5		153.5	187.5	8.4%
Adjust to SEDS (10)	35.3	16.6				16.6		90.2	142.0	6.4%
Total	**393.7**	**82.1**	**8.9**	**34.6**	**10.1**	**135.7**	**8.9**	**1,698.0**	**2,236.3**	100%

Note(s): 1) Emissions assume complete combustion from energy consumption, excluding gas flaring, coal mining, and cement production. Emissions exclude wood since it is assumed that the carbon released from combustion is reabsorbed in a future carbon cycle. Carbon emissions calculated from EIA, Assumptions to the AEO 2008 and differs from EIA, AEO 2008, Table A18. Buildings sector total varies by 0.7% from EIA, AEO 2008. 2) Includes kerosene space heating (5.4 MMT) and motor gasoline other uses (3.5 MMT). 3) Excludes electric imports by utilities. 4) Includes residential furnace fans (10.1 MMT). 5) Includes refrigerators (116.5 MMT) and freezers (15.6 MMT). 6) Includes color television (62.2 MMT) and other office equipment. 7) Commercial only; residential fan and pump energy use included proportionately in space heating and cooling. 8) Includes clothes washers (6.7 MMT), natural gas clothes dryers (3.9 MMT), electric clothes dryers (47.7 MMT), and dishwashers (17.9 MMT). Does not include water heating energy. 9) Includes residential small electric devices, heating elements, motors, swimming pool heaters, hot tub heaters, outdoor grills, and natural gas outdoor lighting. Includes commercial service station equipment, ATMs, telecommunications equipment, medical equipment, pumps, emergency electric generators, and manufacturing performed in commercial buildings. 10) Emissions related to a discrepancy between data sources. Energy attributable to the buildings sector, but not directly to specific end-uses.

Source(s): EIA, Annual Energy Outlook 2008, Mar. 2008, Table A2, p. 117-119, Table A4, p. 132-133 and Table A5, p. 134-135 for energy consumption, and Table A18, p. 143-144 for emissions; EIA, National Energy Modeling System for AEO 2008, Mar. 2008; EIA, Assumptions to the AEO 2008, April 2008, Table 2, p. 10 for emission coefficients; BTS/A.D. Little, Electricity Consumption by Small End-Uses in Residential Buildings, Aug. 1998, Appendix A for residential electric end-uses; BTS/A.D. Little, Energy Consumption Characteristics of Commercial Building HVAC Systems, Volume II: Thermal Distribution, Auxiliary Equipment, and Ventilation, Oct. 1999, p. 1-2; BTP/Navigant Consulting, U.S. Lighting Market Characterization, Volume I, Sept. 2002, Table 8-2, p.63; and EIA, AEO 1999, Dec. 1998, Table A4, p. 118-119 and Table A5, p. 120-121 for 1996 data.